EA Form R 1/2007

Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. **Applicants/Contact names and addresses:**

   Avista Corporation
   1411 E. Mission Ave MSC-1
   Spokane, WA 99202-2600

2. **Type of action:** Surface Water Application for Beneficial Water Use Permit 76N 30148210

3. **Water source name:** Graves Creek

4. **Location affected by project:** Place of use: see Figures 1 – 2 and Table 1 below. Point of diversion: Steep River Ranch Subdivision Lot 25, W2NWNE Section 11, Township 22N, Range 30W, Sanders County, Montana.

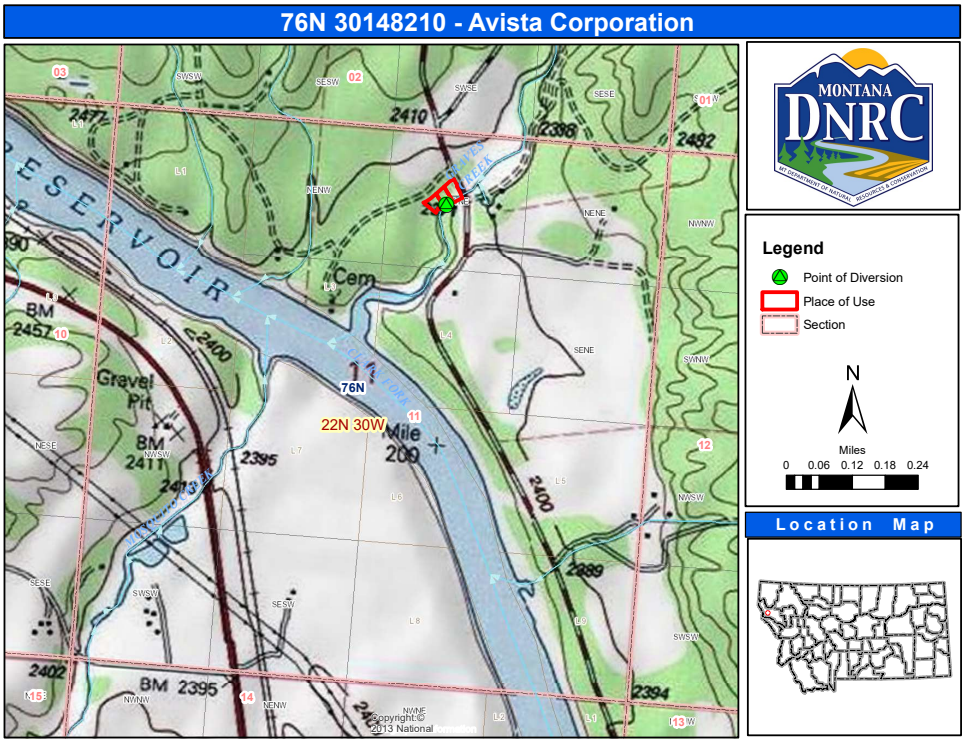

Figure 1. Map of the proposed place of use (Montana fish handling and lawn and garden irrigation) and point of diversion.

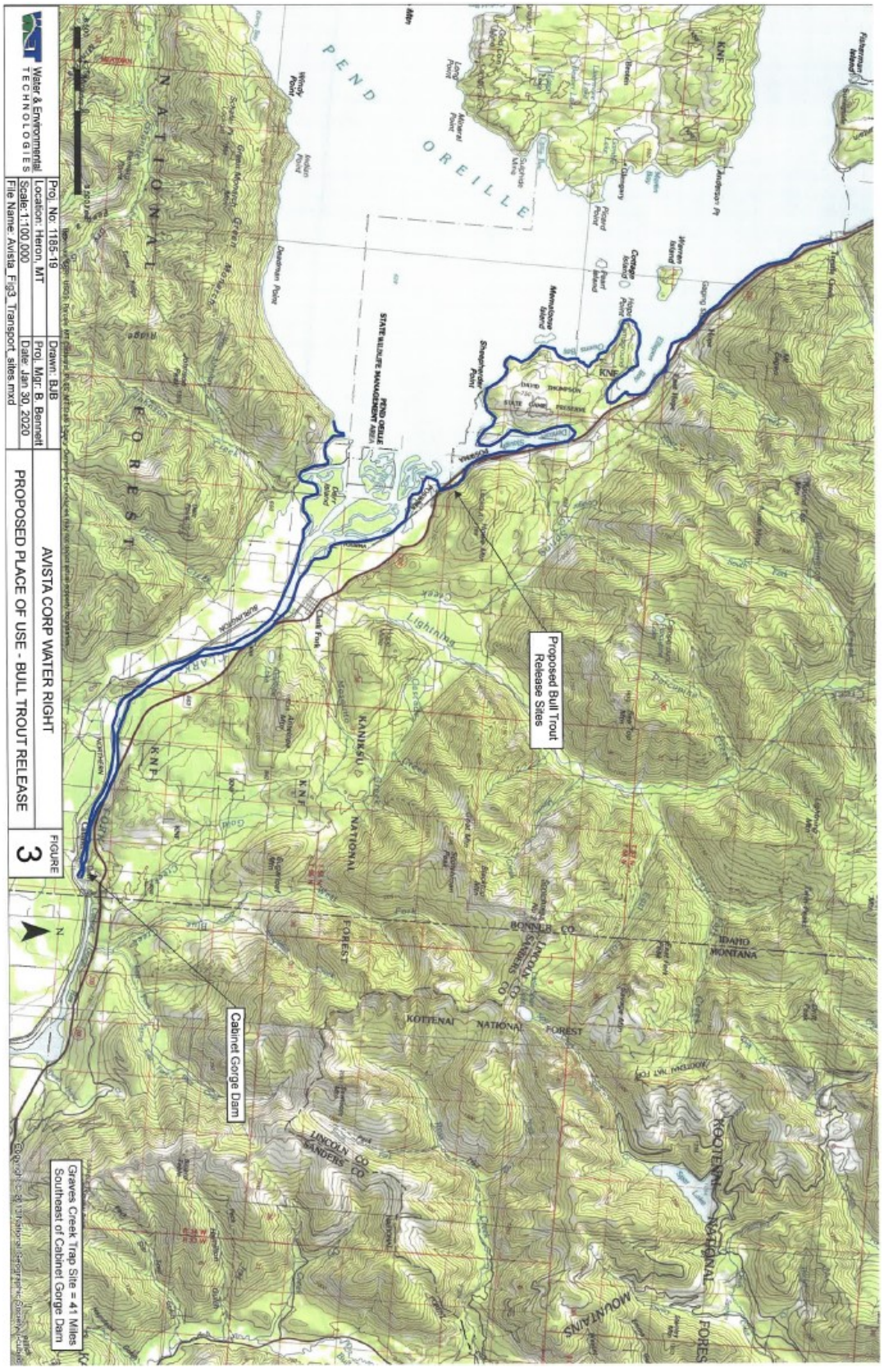

Figure 2: Map of the proposed Idaho fish release sites places of use (the blue outlining represents the areas of shoreline from where fish may potentially be released into the river/lake).

Table 1: Place of use legal land descriptions (including Idaho fish release sites)							
1/4	**1/4**	**1/4**	**Section**	**Township**	**Range**	**County**	**State**
W2	NW	NE	11	22N	30W	Sanders	MT
	S2	SE	19	55N	3E	Bonner	ID
		SW	19	55N	3E	Bonner	ID
	SW	SE	20	55N	3E	Bonner	ID
	SW	NW	26	55N	3E	Bonner	ID
	N2	S2	27	55N	3E	Bonner	ID
	S2	N2	27	55N	3E	Bonner	ID
	S2	NE	28	55N	3E	Bonner	ID
		NW	28	55N	3E	Bonner	ID
	SW	NW	28	55N	3E	Bonner	ID
	N2	N2	29	55N	3E	Bonner	ID
	SE	SW	20	55N	3E	Bonner	ID
	SW	SW	2	55N	2E	Bonner	ID
		S2	3	55N	2E	Bonner	ID
		NW	3	55N	2E	Bonner	ID
			4	55N	2E	Bonner	ID
			5	55N	2E	Bonner	ID
		NE	6	55N	2E	Bonner	ID
		E2	11	55N	2E	Bonner	ID
	NE	NW	11	55N	2E	Bonner	ID
		SW	12	55N	2E	Bonner	ID
	W2	E2	13	55N	2E	Bonner	ID
		W2	13	55N	2E	Bonner	ID
	NE	SE	24	55N	2E	Bonner	ID
		NE	24	55N	2E	Bonner	ID
NE	NE	NW	24	55N	2E	Bonner	ID
		SW	7	56N	2E	Bonner	ID
	W2	SE	7	56N	2E	Bonner	ID
			18	56N	2E	Bonner	ID
			19	56N	2E	Bonner	ID
	SW	SE	20	56N	2E	Bonner	ID
		SW	20	56N	2E	Bonner	ID
	SW	NW	20	56N	2E	Bonner	ID
			29	56N	2E	Bonner	ID
			30	56N	2E	Bonner	ID
			31	56N	2E	Bonner	ID
			32	56N	2E	Bonner	ID
			33	56N	2E	Bonner	ID
			24	56N	1E	Bonner	ID
			14	56N	1E	Bonner	ID
	W2	W2	12	56N	1E	Bonner	ID

Table 1 cont.: Place of use legal land descriptions (including Idaho fish release sites)							
			11	56N	1E	Bonner	ID
			2	56N	1E	Bonner	ID
			1	56N	1E	Bonner	ID
			35	57N	1E	Bonner	ID
			34	57N	1E	Bonner	ID
			27	57N	1E	Bonner	ID
			28	57N	1E	Bonner	ID
			21	57N	1E	Bonner	ID

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

The Applicant proposes to divert water from Graves Creek, a tributary to the Clark Fork River, by means of a pump from January 1 – December 31 at a rate of 35.0 GPM up to 17.7 AF annually for operation of a fish handling facility (16.93 AF) from January 1 – December 31 and for irrigation of 0.3 acres of lawn and garden (0.77 AF) from April 15 – October 15. The point of diversion (POD) is located in the Steep River Ranch Subdivision Lot 25, W2NWNE Section 11, Township 22N, Range 30W, Sanders County, Montana. The proposed places of use for this application include locations in the State of Montana and the State of Idaho. The place of use within Montana is associated with the on-site fish handling facility and lawn and garden irrigation and is generally located in the Steep River Ranch Subdivision Lots 24-26, W2NWNE Section 11, Township 22N, Range 30W, Sanders County, Montana (Figure 1). The places of use within Idaho represent potential fish-release sites along the shores of Lake Pend Oreille (Table 1 and Figure 2). The POD is in the Lower Clark Fork River Basin (76N), in an area that is not subject to water right basin closures or controlled groundwater area restrictions.

Of the proposed maximum annual diversion of 16.93 AF for the fishery (fish handling/transportation) use, approximately 0.26 AF of water will be consumed. Of that amount, 0.24 AF will be consumed via transportation of fish out of the State of Montana into Idaho. 16.67 AF will flow through fish holding tanks in the facility and will discharge back to Graves Creek shortly after initial diversion. Of the proposed maximum annual diversion of 0.77 AF for lawn and garden irrigation, approximately 0.54 AF of water will be consumed, and 0.23 AF will return to the source as irrigation return flows.

The DNRC shall issue a water use permit if the applicant proves the criteria in 85-2-311 MCA are met.

6. Agencies consulted during preparation of the Environmental Assessment:

- U.S. Fish and Wildlife Service (USFWS): National Wetlands Inventory Wetlands Mapper
- Montana Natural Heritage Program: Endangered, Threatened Species, and Species of Special Concern
- Montana Department of Fish Wildlife & Parks (DFWP): Dewatered Stream Information

- Montana Department of Environmental Quality (MDEQ): Clean Water Act Information Center
- U.S. Natural Resource Conservation Service (NRCS): Web Soil Survey

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity **-** *Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.*

The Applicant plans to divert water from Graves Creek, which is tributary to the Lower Clark Fork River. Graves Creek has 0.4 miles of stream listed on the DFWP list of chronically or periodically dewatered streams. The proposed point of diversion and place of use (within Montana) for this project lie within this dewatered reach. However, the proposed use is largely non-consumptive, with the majority of the diverted water returning to the source within seconds of initial diversion. This project has the support of the DFWP and the USFWS, both of which have provided letters of support for this project.

Determination: No significant impact.

Water quality **-** *Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.*

According to the MDEQ Clean Water Act Information Center's 2020 Water Quality Information, Graves Creek has not been assessed for drinking water and primary contact recreation. Graves Creek is listed as "Fully Supporting" for agricultural uses and as "Not Fully Supporting" for aquatic life due to alteration in stream-side or littoral vegetative covers from grazing in riparian or shoreline zones and from non-construction related highway-road-bridge runoff (no TMDL applicable). Graves Creek's Water Quality Category is "4C," meaning identified threats or impairments result from pollution categories such as dewatering or habitat modification and, thus, a TMDL is not required. The applicant consulted with the MDEQ to determine whether or not a Montana Pollutant Discharge Elimination System permit would be required for this project. It was determined that permit was not required.

Determination: No significant impact.

Groundwater **-** *Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.*

Determination: N/A, this project diverts from a surface water source.

DIVERSION WORKS - *Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.*

The Applicant proposes to divert water from Graves Creek at a maximum rate of 35.0 GPM while maintaining a minimum operating pressure of 25 pounds per square inch (psi) (while operating the irrigation system) via a Munro MXS-202 ¾-HP submersible bottom-suction electric pump (or equivalent). The water system supplying the fish handling facility was designed by Water and Environmental Technologies, and the Applicant included a copy of the preliminary design report with the application. The system has the ability to supply a series of holding, recovery, and anesthesia tanks, a fish transportation tanker truck fill station, and the landscaping irrigation system.

The submersible bottom-suction pump will be installed within a filter screen in an engineered pool in Graves Creek located immediately downstream of the concrete pad associated with the fish trapping facility structure. A 1.5-inch lay-flat PVC supply line will convey water to the fish handling facility building. When the supply line enters the facility, it will pass through a totalizing flow meter prior to teeing off to a 1.5-inch schedule 40 PVC trunk line that extends the length of the facility. The trunk line has valved service connections that supply water to the fish holding/recovery/anesthesia tanks, an exterior tanker truck filling station with cam-lock connection, and to exterior hose bibs for lawn and garden irrigation. The system design allows for the pump and main supply line to be easily removed for winterization when necessary.

The facility will contain six fish holding tanks, one fish anesthesia tank, and one fish recovery tank. The tanks will be supplied by ¾-inch PVC supply lines, each of which will be individually controlled via a manual flow control valve to allow for operational flexibility and conservation of water. Based on the provided pump specifications and the total dynamic head (TDH) at the tanks of 28 feet, the system is designed to supply 35.0 GPM to the facility. At the trunk line tee, approximately 18.0 GPM will flow in each direction down the trunk line where the individual tanks will be filled at a rate up to 18.0 GPM. The fish anesthesia tank will require up to 20 gallons of water per day and this water cannot be returned to the source and will be applied to dry ground outside near the facility. The holding and recovery tanks will operate in a flow-through fashion, with fresh water constantly refreshing the tanks after their initial fill in order to keep the water as close to the in-stream temperature as possible to reduce fish stress. The flow through water will gravity-flow out of each tank through a 1-inch drain line, which will collect in a 1.5-inch effluent line which will exit the facility and discharge back into Graves Creek approximately 50-feet downstream of the POD. The tanks will be fully drained when not in use.

An exterior cam-lock valve system will be utilized to connect and fill a 140-gallon insulated tanker truck tank which will be used to transport fish for release downstream of Cabinet Gorge Dam into Lake Pend Oreille (part of the Clark Fork River system) in Idaho. At a TDH of approximately 28 feet, the system is designed to supply 35.0 GPM to the tanker truck. Filling the tanker truck as quickly as feasible is important to keep the water as close to the in-stream temperature as possible to reduce fish stress during transportation. The 140-gallon insulated tank will fill in four minutes at 35.0 GPM. This water will be transported out-of-state with the fish, a portion of which will be discharged with the fish into Lake Pend Oreille. The remainder will be discharged onto dry ground.

Water will be manually diverted to the irrigation system by one of the facility technicians utilizing the exterior hose bibs as required to meet irrigation demand throughout the irrigation season. The irrigation system will consist of ¾-inch hoses supplying above-ground riser-mounted Rain Bird Maxi-Paw impact sprinklers with black nozzles operating at a minimum pressure of 25 psi. At a 25-psi minimum operating pressure, the TDH at the most distant sprinkler head will be 80 feet, and each sprinkler will produce 2.2 GPM and cover a radius of 32 feet. Six sprinklers will operate at any one time for a total irrigation flow rate of 13.2 GPM.

This project will not create any channel impacts, flow modifications, barriers, dams, or riparian impacts to Graves Creek other than those permitted through the appropriate agencies, nor will it affect any constructed wells.

Determination: No significant impact.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species **-** *Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."*

The Montana Natural Heritage Program website was reviewed to determine if there are any threatened or endangered fish, wildlife, plants, aquatic species, or any "species of special concern" in Township 22N, Range 30W that could be impacted by the proposed project. 16 animal and three plant species of concern (Tables 1 and 2, respectively) were identified within the township and range where the project is located. Of these species, the Grizzly Bear (*Ursus arctos)* and the Bull Trout (*Salvelinus confluentus*) are listed as threatened by the USFWS. An adequate quantity of water will still exist in the surface water source to maintain the existing populations of Bull Trout. It is not anticipated that any species of concern will be further impacted by the proposed project. Rather, the goal of the project is to enhance the population of the threatened Bull Trout species.

Table 1. Animal Species of Concern			
Wolverine (*Gulo gulo*)	Little Brown Myotis (*Myotis lucifugus*)	Fisher (*Pekania pennanti*)	Grizzly Bear (*Ursus arctos*)
Great Blue Heron (*Ardea herodias*)	Evening Grosbeak (*Coccothraustes vespertinus*)	Bobolink (*Dolichonyx oryzivorus*)	Pileated Woodpecker (*Dryocopus pileatus*)
Peregrine Falcon (*Falco peregrinus*)	Cassin's Finch (*Haemorhous cassinii*)	Harlequin Duck (*Histrionicus histrionicus*)	Clark's Nutcracker (*Nucifraga columbiana*)
Flammulated Owl (*Psiloscops flammeolus*)	Northern Alligator Lizard (*Elgaria coerulea*)	Westslope Cutthroat Trout (*Oncorhynchus clarkii lewisi*)	Bull Trout (*Salvelinus confluentus*)

Table 2. Plant Species of Concern		
Pale-yellow Jewel-weed (*Impatiens aurella*)	North Idaho Monkeyflower (*Mimulus clivicola*)	Clustered Lady's-slipper (*Cypripedium fasciculatum*)

Determination: No significant impact.

Wetlands **-** *Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.*

Determination: N/A, project does not involve wetlands or critical riparian habitats.

Ponds **-** *For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.*

Determination: N/A, project does not involve ponds.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE **-** *Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.*

It is not anticipated that the proposed diversion of water through the fish trapping facility will have a negative impact on the soil quality, stability, or moisture content. The facility and diversion works were designed by a licensed Professional Engineer and permits for construction have been obtained. The soils in the project area are Oldtrail-Glaciercreek-Larchpoint complex, 0-8 percent slopes, formed from alluvium parent material, and Bonnash gravelly ashy silt loam, 0-4 percent slopes, formed from volcanic ash over alluvium or outwash parent material. These soils have moderately high to high capacity to transmit water and soils in this area are not likely susceptible to saline seep.

Determination: No significant impact.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

Existing vegetation will be cleared for construction of the fish handling facility and associated fish trapping facility. This proposed permit's lawn and garden irrigation purpose of use will serve to supply irrigation water to rehabilitate native vegetation following construction. It is not anticipated that issuance of a water use permit will contribute to the establishment or spread of noxious weeds in the project area. Noxious weed prevention and control will be the responsibility of the landowners who must follow local noxious weed regulations.

Determination: No significant impact.

AIR QUALITY - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

There will be no impact to air quality associated with issuance of the proposed permit for beneficial use of surface water.

Determination: No significant impact.

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.*

Determination: N/A, project not located on State or Federal Lands.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *Assess any other impacts on environmental resources of land, water, and energy not already addressed.*

All impacts to land, water, and energy have been identified and no further impacts are anticipated.

Determination: No significant impact.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

The project is consistent with planned land uses.

Determination: No significant impact.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

The proposed project will not inhibit, alter, or impair access to present recreational opportunities in the area. The project is not expected to create any significant pollution, noise, or traffic congestion in the area that may alter the quality of recreational opportunities. The proposed place of use and diversion do not exist on land designated as wilderness.

Determination: No significant impact.

HUMAN HEALTH - *Assess whether the proposed project impacts human health.*

No negative impact on human health is anticipated from this proposed use.

Determination: No significant impact.

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*
*Yes___ No_**X**_ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights*.

Determination: No impact.

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

(a) Cultural uniqueness and diversity? None identified.

(*b) Local and state tax base and tax revenues?* None identified.

(c) Existing land uses? None identified.

(*d) Quantity and distribution of employment?* None identified.

(e) Distribution and density of population and housing? None identified.

(f) Demands for government services? None identified.

(g) Industrial and commercial activity? None identified.

(h) Utilities? None identified.

(i) Transportation? None identified.

(j) Safety? None identified.

(k) *Other appropriate social and economic circumstances?* None identified.

2. *Secondary and cumulative impacts on the physical environment and human population:*

Secondary Impacts: None identified.

Cumulative Impacts: None identified.

3. *Describe any mitigation/stipulation measures:*

None.

4. *Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:*

The only alternative to the proposed action would be the no action alternative. The no action alternative would not authorize the diversion of water from Graves Creek.

Part III. Conclusion

1. Preferred Alternative

Issue a water use permit if the Applicants prove the criteria in 85-2-311 MCA are met.

2. Comments and Responses

None.

3. Finding:

*Yes___ No_**X**_ Based on the significance criteria evaluated in this EA, is an EIS required?*

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:

No significant impacts related to the proposed project have been identified.

Name of person(s) responsible for preparation of EA:

Name: Travis Wilson
Title: Water Resource Specialist
Date: October 14, 2020